

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

HP2003003886 JUNE 15 MAY 2006

Application No. :

U.S. National Serial No. : 10/540,516

Filed : JUNE 23, 2005

PCT International Application No. : PCT/FR2003/003886

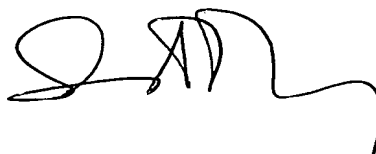
VERIFICATION OF A TRANSLATION

I, Susan ANTHONY BA, ACIS,

Director of RWS Group Ltd, of Europa House, Marsham Way, Gerrards Cross, Buckinghamshire, England declare:

That the translator responsible for the attached translation is knowledgeable in the French language in which the below identified international application was filed, and that, to the best of RWS Group Ltd knowledge and belief, the English translation of the international application No. PCT/FR2003/003886 is a true and complete translation of the above identified international application as filed.

I hereby declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application issued thereon.



Date: July 14, 2005

Signature :

For and on behalf of RWS Group Ltd

Post Office Address :

Europa House, Marsham Way,  
Gerrards Cross, Buckinghamshire,  
England.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date

15 July 2004 (15.07.2004)

PCT

(10) International publication number

WO 2004/059302 A1

(51) International patent classification<sup>7</sup>:

G01N 21/64

(72) Inventors; and

(21) International application number: PCT/FR2003/003886

(75) Inventors/Applicants (US only): SOUSSALINE, Françoise [FR/FR]; Rue Cassini, 1, F-75014 Paris (FR). KHOMYAKOVA, Elena [RU/FR]; 5, rue Paul Louis Courier, F-75007 Paris (FR).

(22) International filing date: 23 December 2003 (23.12.2003)

(25) Language of filing:

French

(74) Representatives: MARTIN, Jean-Jacques etc.; Cabinet Regimbeau, 20, rue de Chazelles, F-75847 Paris Cedex 17 (FR).

(26) Language of publication:

French

(30) Data relating to the priority:

02/16,500

23 December 2002 (23.12.2002)

FR

(81) Designated states (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,

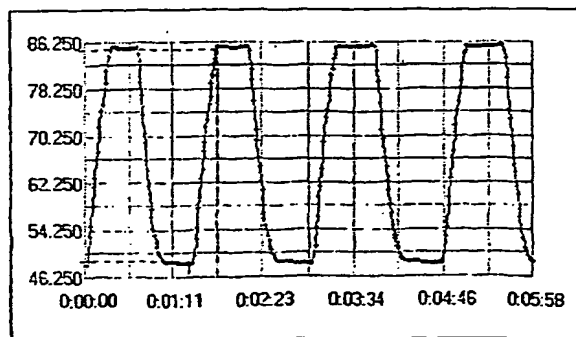
(71) Applicant (for all designated States except US): IMSTAR IMAGE ET MODELISATION: STRATEGIE, ANALYSE ET REALISATION [FR/FR]; 60, rue Notre-Dame des Champs, F-75006 Paris (FR).

[continued on next page]

As printed

(54) Title: CHIP READER FOR BIOCHIPS AND ASSOCIATED METHODS

(54) Titre : LECTEUR DE PUCES DE TYPE BIOPUCES, ET PROCEDES ASSOCIES



AA... Chauffage 2.3 °C/s  
Refroidissement 2.3 °C/s  
AA... CHAUFFAGE: HEATING  
REFROIDISSEMENT: COOLING

(57) Abstract: The invention relates to a device which is used to read and analyse chips. The inventive device comprises a table (11) for receiving a chip (12) that is intended to characterise at least one sample, means of exciting the molecules or cells of the chip after reaction with other molecules and means (14) of reading and analysing the molecules subjected to excitation. The invention is characterised in that the device also comprises: a unit (15) for controlling the temperature of the aforementioned table, said control unit being connected to a module (111) consisting of a plurality of Peltier-type heating/cooling elements which are disposed opposite different slots on the surface of the table; and at least one table temperature sensor (112) which is also connected to said control unit. The invention also relates to the associated methods.

(57) Abrégé : L'invention concerne un dispositif de lecture et analyse de puces, comprenant : une table (11) pour recevoir une puce (12) destinée à

caractériser au moins un échantillon, des moyens d'excitation des molécules ou des cellules de la puce, après réaction avec d'autres molécules, des moyens de lecture et d'analyse (14) des molécules soumises à excitation, caractérisé en ce que le dispositif comprend également : une centrale de commande de température (15) de ladite table, ladite centrale de commande étant reliée à un module (111) comportant une pluralité d'éléments de chauffage/refroidissement de type Peltier disposés en regard de différents emplacements de la surface de la table, et au moins un capteur de température de la table (112) également relié à ladite centrale de commande. L'invention concerne également des procédés associés.

WO 2004/059302 A1

SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) **Designated states (regional):** ARIPO Patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian Patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

- *Of inventorship (Rule 4.17(iv)) for the following designation US.*

**Published:**

- *With International Search Report.*
- *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

*For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*